



# ECEN Academy

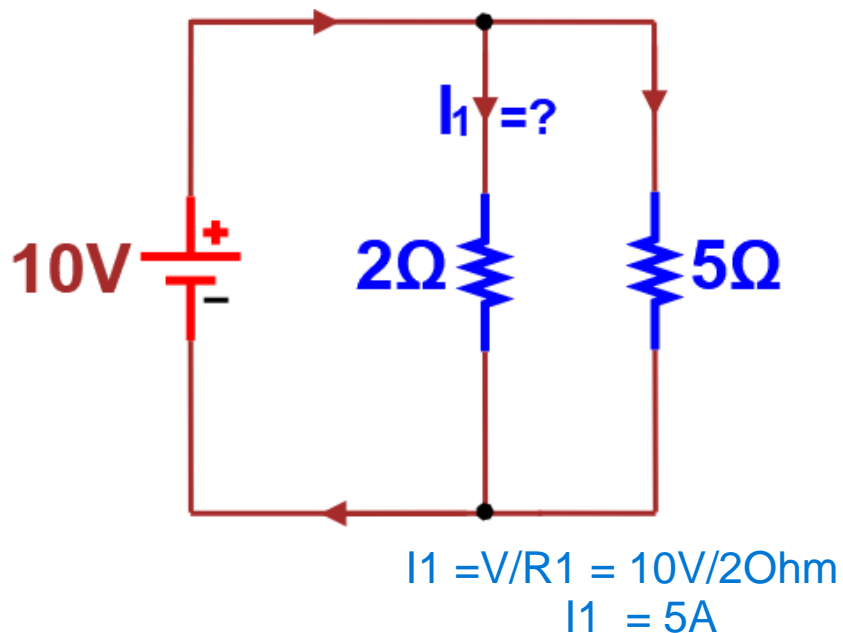
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 31

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.





# ECEN Academy

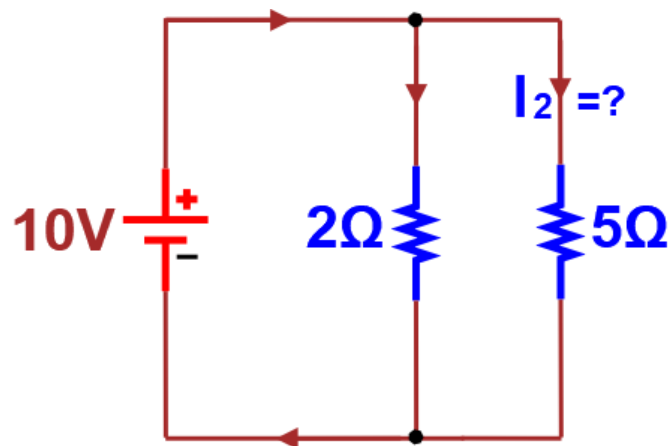
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 32

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} I_2 &= V/R_2 \\ &= 10/5 \\ &= 2A \end{aligned}$$



# ECEN Academy

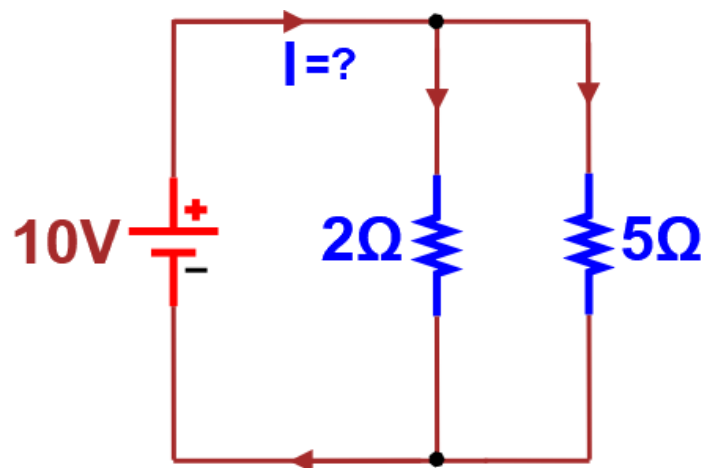
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 33

Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$I = V / ((R_1 R_2) / (R_1 + R_2))$$
$$I = 7A$$



# ECEN Academy

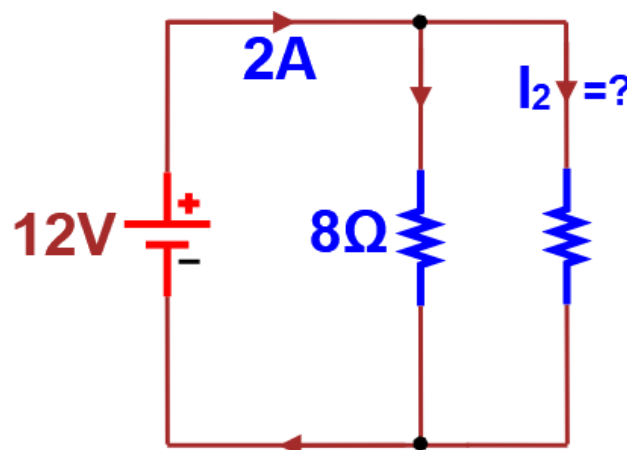
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 34

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} I &= 2A, V = 12V \\ I_1 &= 12/8 = 1.5A \\ I_2 &= I - I_1 = 2 - 1.5 \\ \underline{I_2} &= \underline{0.5A} \end{aligned}$$



# ECEN Academy

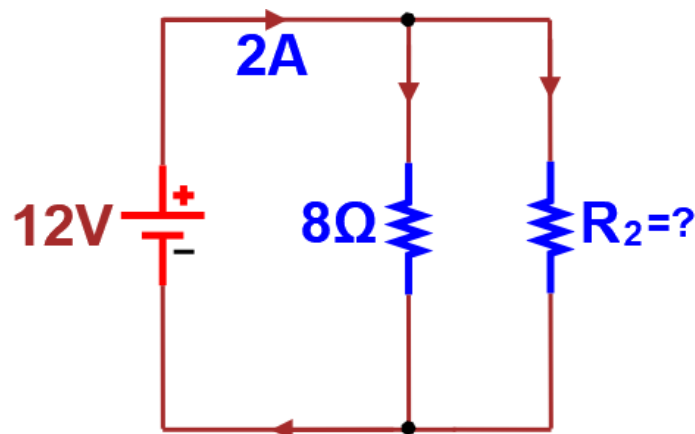
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 35

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} V &= 12V, I = 2A \\ I_2 &= 0.5A, I_1 = 1.5A \\ R_2 &= V/I_2 = 24\Omega \end{aligned}$$



# ECEN Academy

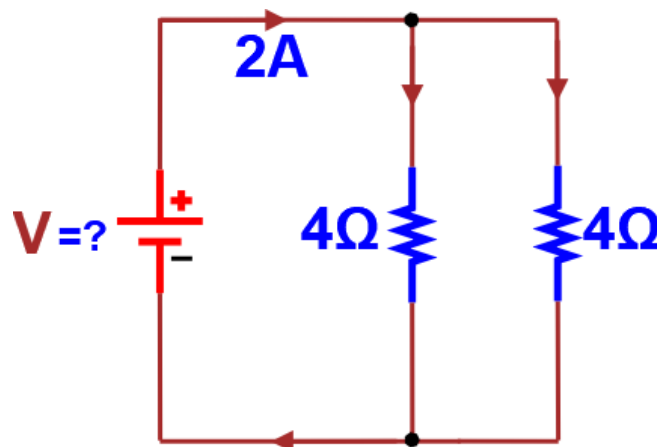
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 36

Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} V &= I * ((R_1 * R_2) / (R_1 + R_2)) \\ &= 2 * (16/8) \\ V &= 4V \end{aligned}$$



# ECEN Academy

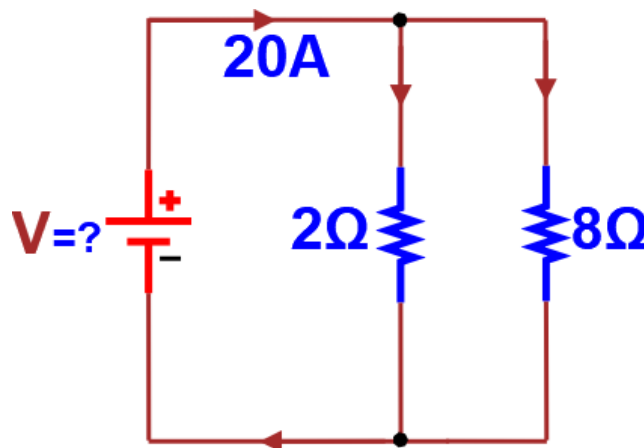
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 37

Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} V &= I * ((R1 * R2) / (R1 + R2)) \\ &= 20 * (16 / 10) \\ V &= \underline{32V} \end{aligned}$$



# ECEN Academy

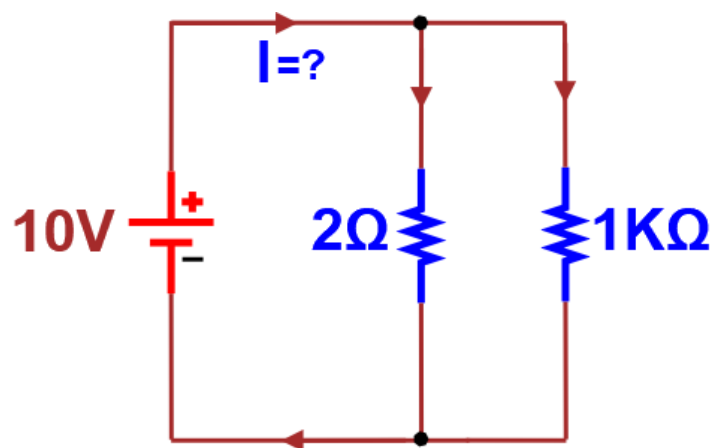
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 38

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} I &= V / ((R1 * R2) / (R1 + R2)) \\ &= 10 / (2000 / 1002) \\ I &= \underline{5.01A} \end{aligned}$$





# ECEN Academy

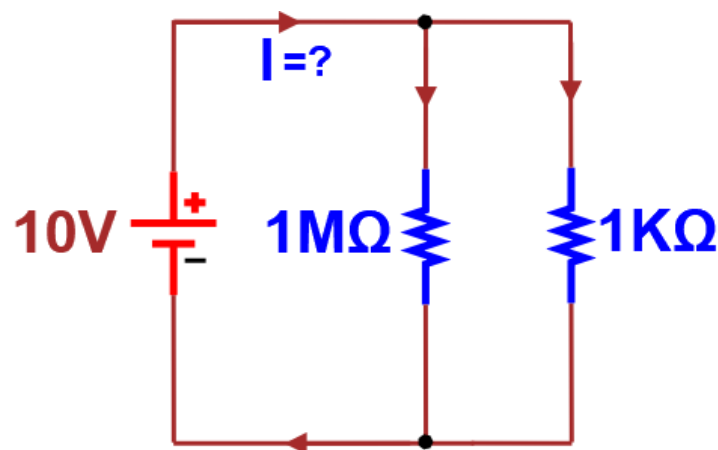
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 39

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} I &= V / ((R1 * R2) / (R1 + R2)) \\ &= 10 / (1000000000 / 1001000) \\ I &= 10.01 \text{mA} \end{aligned}$$



# ECEN Academy

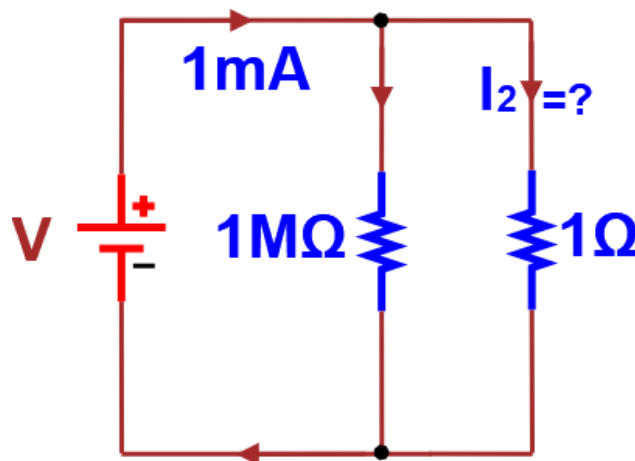
[www.ecenacademy.com](http://www.ecenacademy.com)

 - (91) 97908 73099

## Electrical Problem – 40

### Instructions:

1. Do not discuss with any one while solving the problems
2. Do not use internet while solving the problems
3. Do not use books while solving the problems
4. Do not try to copy from others
5. Do the problems in an easy way.



$$\begin{aligned} I &= 1mA, \\ V &= I * ((R1 * R2) / (R1 + R2)) \\ &= 0.00099...V \\ I_2 &= V / R_2 \\ &= 0.00099...V / 1\Omega \\ &= 0.00099...A \\ I_2 &\sim 1mA \end{aligned}$$